



- NOTES:
- WELD ASSEMBLY ACCORDING TO SEQUENCE SHOWN
  - VACUUM ASSEMBLY SHALL BE LEAK TESTED USING A MASS SPECTROMETER WITH MINIMUM SENSITIVITY FOR HELIUM OF 2X 10 -10 STANDARD CC/SEC PER LEAK METER DIVISION, SUCH AS:

ALCATEL ASM-110TCL  
VARIAN NCR 925 OR 936  
VEECO MS-9, MS-90 OR MS-18  
Du PONT CEC 24-120B

CALIBRATION OF THE LEAK DETECTOR SENSITIVITY SHALL BE PERFORMED JUST PRIOR TO TESTING.

FINAL TEST WILL CONSIST OF SURROUNDING THE ASSEMBLY (BAGGING) WITH HELIUM. THE ASSEMBLY WILL BE REJECTED IF A 2% DEFLECTION IN THE MOST SENSITIVE RANGE OF THE LEAK DETECTOR IS SENSED WITHIN 1 MIN.

3. KEEP THE PART CLEAN, AND WRAP FOR UHV PACKING WITH ALUMINUM FOIL.

4. DIMENSIONS IN [ ] ARE MILLIMETERS

6				
5		ST'D. BELLOWS CAT. #220-104-3-AB	SST	1
4		#8 - 32 UNC X 3/16 LG. SET SCREW	SST	2
3	P4102010103-220203	P1 BELLOWS CLEVIS	304 SST	1
2	P4102010103-220202	P1 LOWER BELLOWS FLANGE	304 SST	1
1	P4102010103-220201	P1 UPPER BELLOWS FLANGE	304 SST	1

ITEM	BYG/PART NUMBER	NOMENCLATURE OR DESCRIPTION	MATERIAL / SPEC	QTY
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#### PARTS LIST

UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE IN INCHES.		LOG NUMBER		THIS DRAWING IS THE PROPERTY OF	
TOLERANCES		A0950101		ARGONNE NATIONAL LABORATORY	
DECIMALS	ANGLES	DATE	CHEF DESIGN ENGINEER	DATE	TITLE
.1	.03 [7620]	3/5/93	D. SHU	8/27/93	ADVANCED PHOTON SOURCE
.2	.01 [0.25]		OP LEADER		P1 1- ST PHOTON SHUTTER
.3	.005 [0.127]		DESIGNER		SLOW ACTUATOR
		8/27/93	T.M. KUZAY	8/27/93	BELLOWS VACUUM FLANGE
			PROJECT MGR		WELDMENT ASSEMBLY
		8/27/93	RESPONSIBLE ENGINEER		
		8/27/93	D. SHU		
			APPROVED/RELEASED		

MATERIAL  
SEE PARTS LIST

SCALE	HALF	SHEET	1 of 1	DRAWING NUMBER	P4102010103-220200-01
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SECTION A - A

#### REF. SOURCES

STANDARD BELLOWS CO.  
375 TURNPIKE AVE.  
WINDSOR LOCKS, CON. 06096

1	SCALE 10X WAS SCALE 5X			
	SCALE 10X WAS SCALE 10X			
	DRAWING BROUGHT UP TO DATE	M.J.M.		
SYN	CHANGE DESCRIPTION	BY	CHKD	DATE
	REVISIONS			